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Author Disclosures

- The following personal financial relationships with commercial interests relevant to this presentation existed within the past 12 months:
 - No relationships to disclose

Adolescent Alcohol Use

- Adolescent alcohol use is a major public health problem
- Alcohol use is associated with the leading causes of injury and death among adolescents
- Early drinking increases the risk for alcohol-related problems
- Heavy or "binge" drinking is also associated with many other health risk behaviors and alcohol-related problems

Alcohol & Sports

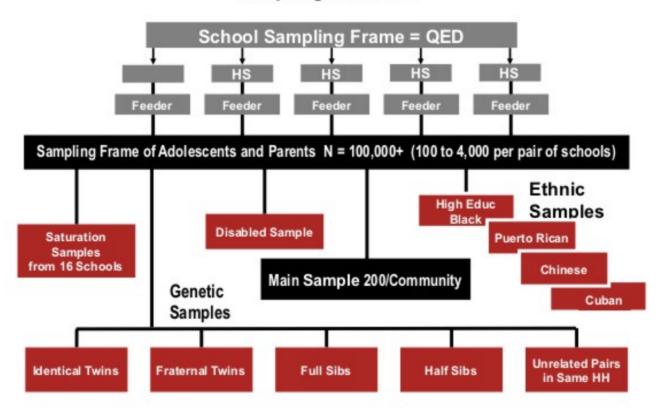
- Sports represent important contexts of development
- Research suggests that sports participation is associated with adolescent alcohol use
- Many factors may influence this relationship:
 - Sports-specific factors
 - Differences between males & females
- Research on sports participation and alcohol use is hindered by several limitations
 - In particular, there have been few longitudinal investigations of this relationship

Specific Aims

- Examine the longitudinal relationship between participation in school-based sports and other extracurricular activities and problem alcohol use (PAU) by analyzing data from a national, multi-wave study of adolescents
- Assess differences between males and females in this relationship

Methods

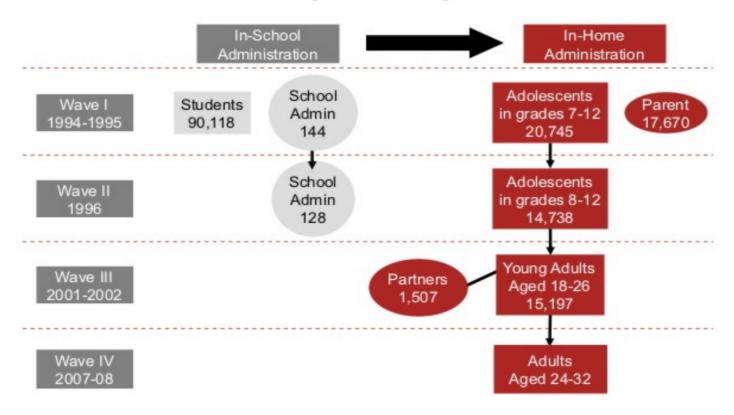
Sampling Structure



Source: http://www.cpc.unc.edu/projects/addhealth/design

Methods

Longitudinal Design



Source: http://www.cpc.unc.edu/projects/addhealth/design

Measures

- Index assessing participation in school-based sports and other activities at in-school assessment
- Measures of PAU at waves 1, 2, & 3
 - Drinking past 12 months, getting drunk past 12 months, binge drinking past 12 months, consequences of alcohol use
- Other predictors of alcohol-related behaviors:
 - Peer ("friends") drinking (1 item, range 0-3)
 - Parental monitoring (7 items, α =0.94)
 - Parental alcoholism (parent-reported,1 dichotomous item)

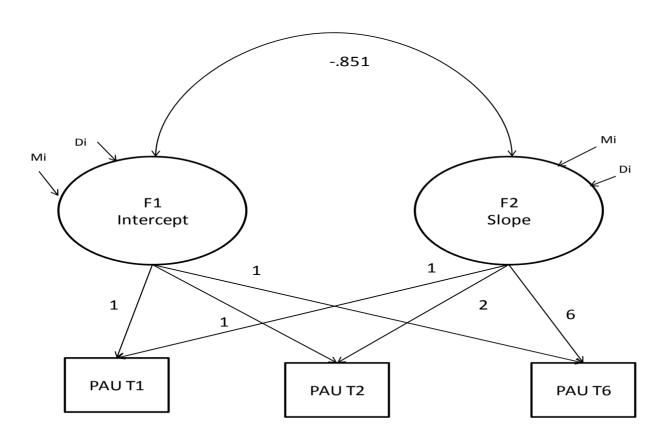
Variables

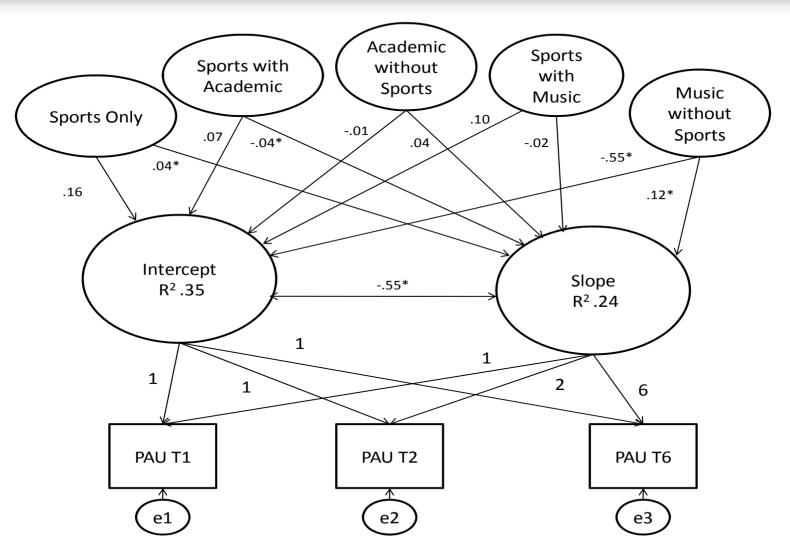
- PAU:
 - Wave 1, 12 items, KR-20 = 0.87
 - Wave 2, 13 items, KR-20 = 0.88
 - Wave 3, 12 items, KR-20 = 0.86
- Sports involvement (number of sports)
- Dichotomous variables for academic and music activities
- Interactions between sports and academic and music activities based on standardized sports variable
- Covariates: peer drinking, parental monitoring, parental alcoholism, age, ethnicity, sex (where appropriate)

Sample

Characteristic (n = 8,271)	Mean (SD)/ %
Female	54%
Wave 1 Age	14.7 (1.57)
Non-Hispanic White	56%
Number of sports	1.20 (1.47)*
Music Activities	24%
Academic Activities	34%
Parental Monitoring	5.49 (4.41)
Friends' Drinking	1.10 (1.39)
Parental alcoholism (parent-reported)	15.9%

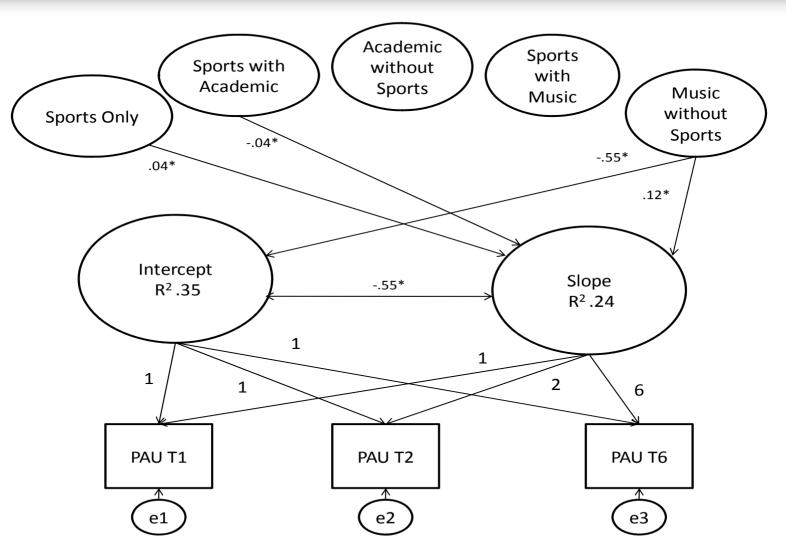
Unconditional LGM





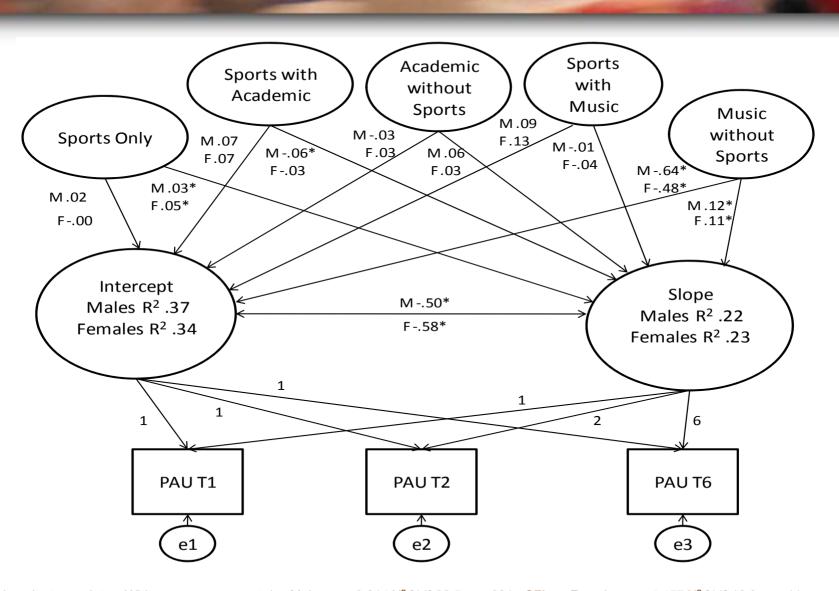
Time invariant covariates: Sex, White race, age, parental alcoholism, friends' drinking, parental monitoring

N =8,271 X² [12] 30.9, p .002, CFI 1.00, RMSEA = 0.01



Time invariant covariates: Sex, White race, age, parental alcoholism, friends' drinking, parental monitoring

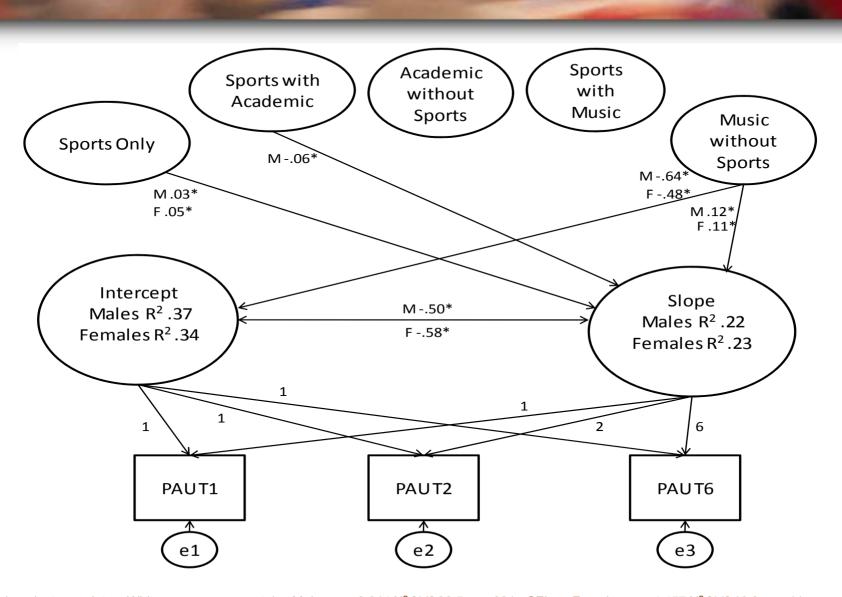
N =8,271 X² [12] 30.9, p .002, CFI 1.00, RMSEA = 0.01



Time invariant covariates: White race, age, parental alcoholism, friends' drinking, parental monitoring

Males: $n = 3,814 \text{ X}^2$ [11] 36.5, p <.001, CFI .99, RMSEA = 0.03

Females: $n = 4,457 \text{ X}^2$ [11] 16.9, p =.11, CFI 1.00, RMSEA = 0.01



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Discussion

- Patterns of PAU over time were consistent with prior research
- Findings highlight the importance of taking into account sports and non-sports activities and differences between males and females
- Sports and other activities may represent important contexts for selective interventions
- Future research is needed to explore optimal targets for interventions

Limitations

- Study assessments based on self-report, potentially subject to biases
- Only adolescents in school were included in the sample
- Sample was limited to those who responded to all waves of data collection
- Limited shape of growth curves that could be tested

Conclusions

- Participation in sports and other activities is associated with alcoholrelated behaviors longitudinally
- Sports and other school-based activities may represent important contexts for interventions for alcohol use and other risky behaviors